

E2d
Amended center and the drain region is shorter than a distance between the recombination center and the source region,

wherein the recombination center is detached from the drain region.

REMARKS

Claims 1-24 are pending. By this Amendment, claims 1 and 14 are amended. Claims 1-15 are presently under consideration, and non-elected claims 16-24 have been withdrawn by the Examiner. No new matter has been added. Reconsideration in view of the above amendments and following remarks is respectfully requested. The attached Appendix includes marked-up copies of each rewritten claim (37 C.F.R. §1.121(c)(1)(ii)).

Entry of this Amendment is proper under 37 C.F.R. §1.116 since the Amendment: (a) places the Application in condition for allowance (for the reasons discussed herein); (b) does not raise any new issue requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout the prosecution); (c) satisfies a requirement of form asserted in the previous Office Action; and (d) places the Application in better form for appeal, should an appeal be necessary. Entry of this Amendment is thus respectfully requested.

The Office Action rejects claims 1, 3-5, 7-8 and 14 under 35 U.S.C. §102(b) as being anticipated by U.S. Patent 5,008,723 to van der Have; and rejects claims 2, 6, 9-13 and 15 under 35 U.S.C. §103(a) as being unpatentable over van der Have. Applicants respectfully traverse these rejections.

Van der Have fails to teach, suggest, or render obvious, all of the features recited in independent claims 1 and 14. In particular, van der Have does not teach or suggest a method of manufacturing a thin-film transistor by forming a recombination center "wherein the recombination center is detached from the drain region" (emphasis added).

In stark contrast, van der Have discloses that a lightly doped drain 1' must be attached to the drain 14'. See, e.g., col. 5, lines 46-50 and Fig. 9. van der Have's disclosure is absolutely silent about disclosing any method of manufacturing a thin-film transistor in which the recombination center is detached from the drain region (1' or 14').

For at least the reasons discussed above, Applicants respectfully submit that van der Have fails to anticipate, or render obvious, the subject matter of independent claims 1 and 14. Accordingly, van der Have fails to anticipate, or render obvious, the subject matter of claims 2-15, which depend from claim 1. Withdrawal of the rejections under 35 USC §102(b) and §103(a) is therefore respectfully solicited

In view of the foregoing, Applicants submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact Applicants' representative at the telephone number listed below.

Respectfully submitted,



James A. Oliff
Registration No. 27,075

Robert Z. Evora
Registration No. 47,356

MAC:RZE

Date: April 8, 2003

Attachment:
Appendix

OLIFF & BERRIDGE, PLC
P.O. Box 19928
Alexandria, Virginia 22320
Telephone: (703) 836-6400

<p>DEPOSIT ACCOUNT USE AUTHORIZATION Please grant any extension necessary for entry; Charge any fee due to our Deposit Account No. 15-0461</p>

APPENDIX

Changes to Claims:

The following is a marked-up version of the amended claims:

1. (Thrice Twice-Amended) A method of manufacturing a thin-film transistor, comprising:

forming a channel region facing a gate electrode through a gate insulating film;

forming source and drain regions connected to the channel region in a semiconductor film that is formed on a surface of an insulating substrate; and

forming a recombination center by introducing an impurity into the channel region so that a distance between the recombination center and the drain region is shorter than a distance between the recombination center and the source region,

wherein the recombination center is detached from the drain region.

14. (Twice Amended) A method of manufacturing a display device comprising a thin-film transistor that is manufactured by:

forming a channel region facing a gate electrode through a gate insulating film;

forming source and drain regions connected to the channel region in a semiconductor film that is formed on a surface of an insulating substrate; and

forming a recombination center that captures carriers in the channel region by introducing an impurity into said channel region so that a distance between the recombination center and the drain region is shorter than a distance between the recombination center and the source region,

wherein the recombination center is detached from the drain region.